| 2008 Current Fisca | I Year Report: | : National Math | ematics Advisor | y Panel |
|--------------------|----------------|-----------------|-----------------|---------|
|--------------------|----------------|-----------------|-----------------|---------|

Report Run Date: 06/05/2019 06:55:42 AM

1. Department or Agency 2. Fiscal Year

2008 Department of Education

3. Committee or Subcommittee 3b. GSA Committee No.

National Mathematics Advisory Panel 29130

4. Is this New During Fiscal 5. Current 6. Expected Renewal 7. Expected Term

Year? Date Charter Date

05/03/2006 04/18/2008 Nο

8a. Was Terminated During 8b. Specific Termination 8c. Actual Term

FiscalYear? Authority Date

Yes Executive Order 13398 05/08/2008

9. Agency Recommendation for Next10a. Legislation Req to 10b. Legislation

**FiscalYear** Terminate? Pending?

Terminate No

**11. Establishment Authority** Presidential

12. Specific Establishment 13. Effective 14. Commitee 14c.

**Authority** Date Presidential? Type

Executive Order 13398 04/18/2006 Ad hoc Yes

**15. Description of Committee** National Policy Issue Advisory Board

16a. Total Number of Reports 2

16b. Report Report Title

Date

Foundations For Success: Reports of the Task Groups and Subcommittees of the National Mathematics Advisory Panel

03/13/2008Foundations for Success: Report of the National Mathematics Advisory Panel

# Number of Committee Reports Listed: 2

# 17a. Open 4 17b. Closed 0 17c. Partially Closed 0 Other Activities 0 17d. Total 4 **Meetings and Dates**

| Purpose  | Start      | End            |
|--|------------|----------------|
| The purpose of the ninth meeting was to develop the First and Second Common Concepts in order to       |            |                |
| reach a Panel-wide concept of the Final Report. In addition, two of the task groups, Instructional     | 10/22/2007 | 7 - 10/24/2007 |
| Practices and Assessment, met to complete their work. Michael Crow, the President of Arizona State     | 10/23/2007 | - 10/24/2007   |
| University, welcomed the Panel and the Panel also received comments from the general public.           |            |                |
| The purpose of the tenth meeting was to discuss the Panel's Final Report draft and to complete the wor | rk         |                |
| of two task groups, Instructional Practices and Assessment. The Secretary of Education, Margaret       | 11/20/2007 | 7 - 11/28/2007 |
| Spellings, addressed the Panel, thanking them for their hard work to complete the Final Report by the  | 11/28/2007 | - 11/28/2007   |
| February 28, 2008 deadline.  |            |                |
| The purpose of the eleventh meeting was to discuss the Final Report draft and to complete the work of  | 40/44/000  | 40/45/0007     |
| the Assessment Task Group.   | 12/14/2007 | 7 - 12/15/2007 |

The purpose of the twelfth and final meeting was to adopt and release the Panel's Final Report. In addition, Panel members made remarks on their view of important items in the Final Report. The Panel presented its Final Report to the Secretary of Education, Margaret Spellings, and she thanked them for their work in completing the Final Report.

03/13/2008 - 03/13/2008

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# Number of Committee Meetings Listed: 4

|  | Current FY Next F |        |
|--|-------------------|--------|
| 18a(1). Personnel Pmts to Non-Federal Members                  | \$0.00            | \$0.00 |
| 18a(2). Personnel Pmts to Federal Members                      | \$38,489.00       | \$0.00 |
| 18a(3). Personnel Pmts to Federal Staff                        | \$322,097.00      | \$0.00 |
| 18a(4). Personnel Pmts to Non-Member Consultants               | \$617,401.00      | \$0.00 |
| 18b(1). Travel and Per Diem to Non-Federal Members             | \$51,672.00       | \$0.00 |
| 18b(2). Travel and Per Diem to Federal Members                 | \$1,898.00        | \$0.00 |
| 18b(3). Travel and Per Diem to Federal Staff                   | \$13,018.00       | \$0.00 |
| 18b(4). Travel and Per Diem to Non-member Consultants          | \$0.00            | \$0.00 |
| 18c. Other(rents,user charges, graphics, printing, mail, etc.) | \$185,984.00      | \$0.00 |
| 18d. Total   | \$1,230,559.00    | \$0.00 |
| 19. Federal Staff Support Years (FTE)                          | 4.50              | 0.00   |

# 20a. How does the Committee accomplish its purpose?

The Panel advised the President and the U.S. Secretary of Education (Secretary) on means to implement effectively the policy set forth in section 1 of the Executive Order, including with respect to the conduct, evaluation, and effective use of the results of research relating to proven-effective and evidence-based mathematics instruction. The Panel submitted its Preliminary Report to the President, through the Secretary on March 8, 2007. The Final Report was submitted to the President, through the Secretary on March 13, 2008. As required in the Executive Order, the report contains recommendations based on the best scientific evidence available on: (a) the critical skills and skill progressions for students to acquire competence in algebra and readiness for higher levels of mathematics; (b) the role and appropriate design of standards and assessment in promoting mathematical competence; (c) the processes by which students of various abilities and backgrounds learn mathematics; (d) instructional practices, programs, and materials that are effective for improving mathematics learning; (e) the training, selection, placement, and professional development of teachers of mathematics in order to enhance students' learning of mathematics; (f) the role and appropriate design of systems for delivering instruction in mathematics that combine the different elements of learning processes, curricula, instruction, teacher training and support, and standards, assessments, and accountability; (g) needs for research in support of mathematics education; (h) ideas for strengthening capabilities to teach children and youth basic mathematics, geometry, algebra, and calculus and other mathematical disciplines; (i) such other matters relating to mathematics education as the Panel deems appropriate; and (j) such other matters relating to mathematics education as the Secretary may require. The

Panel obtained information and advice as appropriate in the course of its work from: (i) officers or employees of Federal agencies, unless otherwise directed by the head of the agency concerned; (ii) State, local, territorial, and tribal officials; (iii) experts on matters relating to the policy set forth in section 1; (iv) parents and teachers; and (v) such other individuals as the Panel deemed appropriate. The National Math Panel staff and NMP Chair held three stakeholder meetings in Washington, DC. Two of the meetings, one during December 2006 and the other during September 2007, informed leaders of major associations and organizations interested in the Panel's charge about the progress and expected outcomes of the Panel's work. The Panel considered the views and comments of these important stakeholders during its deliberations for the Final Report. During the third stakeholder meeting in Washington, DC, March 2008, the NMP Chair and the Deputy Secretary, also an Ex Officio of the NMP, presented a briefing on the Final Report and took questions from the audience. Throughout the year, Panelists were invited to various conferences of organizations interested in mathematics education. For each meeting the National Math Panel staff prepared an updated briefing including the latest developments on the Panel's progress. In October 2007 the Panel held a 2-day meeting in Phoenix to work in synthesis groups on a common concept for the Final Report and to receive public comments on elements of the Executive Order. At two meetings in Baltimore the Panel worked on the Final Report. At the final meeting, the Final Report was adopted and delivered to the Secretary. Between meetings, Panel members were in frequent phone and email contact to complete the Panel's work.

## 20b. How does the Committee balance its membership?

The Panel consisted of no more than 30 members as follows: No more than 20 members not employed by the Federal Government. No more than 10 shall be employed with the Federal government. The Panel members came from varied backgrounds including academia, business, state and federal government, and school districts.

# 20c. How frequent and relevant are the Committee Meetings?

The Panel met every one to three months from May 2006 through March 2008. All of these meetings were critical to the Panel's work. In FY 2006 the Panel had 3 meetings to begin its work. In FY 2007 the Panel completed the majority of its task group and subcommittee work during a series of 5 meetings. In FY 2008 there were 4 meetings that focused on the completion of the Final Report.

# 20d. Why can't the advice or information this committee provides be obtained elsewhere?

The National Mathematics Advisory Panel was necessary to assist with the administration's policy on American competitiveness. The Panel reviewed

scientifically-based evidence as it relates to mathematics learning with a specific emphasis on algebra readiness and algebra success. President Bush introduced the American Competitiveness Initiative (ACI) in his State of the Union Address on January 31, 2006. Specifically, as related to the charge of the National Mathematics Advisory Panel, the ACI aims to strengthen K-12 math and science education by enhancing our understanding of how students learn and applying that knowledge to train highly qualified teachers, develop effective curricular materials, standards and assessments and improve student learning.

# 20e. Why is it necessary to close and/or partially closed committee meetings?

During FY 2008 there were no closed meetings. There was only one hour during the seventh meeting on 6/05/2007 in Miami, FL when the meeting was closed. During this hour the Panel participated in a session with the Department's Office of the General Counsel for the required annual Ethics training.

#### 21. Remarks

The National Math Panel was established by Executive Order 13398 on April 18, 2006. The termination date was April 18, 2008.

# **Designated Federal Officer**

Tyrrell Flawn Executive Director, National Math Panel

| Committee<br>Members | Start        | End        | Occupation  | Member<br>Designation                                       |
|----------------------|--------------|------------|---|---|
| Arispe, Irma         | 05/30/2007   | 04/18/2008 | Assistant Director for Life Sciences and Acting Assistant Director for Social and Behavioral Sciences at the White House Office on Science and Technology Policy (OSTP) | Ex Officio Member   |
| Benbow,<br>Camilla   | 05/22/2006   | 04/18/2008 | Dean of Education and Human Development, Vanderbilt University, Peabody College   | Special<br>Government<br>Employee (SGE)<br>Member           |
| Berch, Dan           | 05/22/2006   | 04/18/2008 | National Institute of Child Health and Human Development, National Institutes of Health   | Ex Officio Member   |
| Boykin, Wade         | 05/22/2006   | 04/18/2008 | Professor and Director of the Developmental Psychology Graduate Program in the Department of Psychology, Howard University  | Special<br>Government<br>Employee (SGE)                     |
| Clements,<br>Douglas | 03/19/2007   | 04/18/2008 | Professor, Learning and Instruction, University at Buffalo, State University of New York Graduate School of Education   | Member<br>Special<br>Government<br>Employee (SGE)<br>Member |
| Embretson,<br>Susan  | 03/19/2007   | 04/18/2008 | Professor of Psychology at the Georgia Institute of Technology  | Special Government Employee (SGE) Member                    |
| Faulkner, Larr       | y 05/22/2006 | 04/18/2008 | President of Houston Endowment, Inc. and President Emeritus of the University of Texas at Austin  | Special Government Employee (SGE) Member                    |

| Fennell,<br>Francis          | 05/22/2006   | 04/18/2008 | Professor of Education, McDaniel College; President, National Council of Teachers of Mathematics  | Employee (SGE)<br>Member                                     |
|------------------------------|--------------|------------|---|--|
| Ferrini-Mundy,<br>Joan       | 01/16/2007   | 04/18/2008 | Division Director of the National Science Foundation's (NSF) Division o<br>Elementary, Secondary, and Informal Education, in the Directorate for<br>Education and Human Resources |  |
| Fristedt, Bert               | 03/19/2007   | 04/18/2008 | Morse-Alumni Distinguished Teacher of Mathematics at the University of Minnesota, Twin Cities   | Special<br>Government<br>Employee (SGE)<br>Member<br>Special |
| Geary, David                 | 05/22/2006   | 04/18/2008 | Curators' Professor, Departmental of Psychological Sciences,<br>University of Missouri at Columbia  | Government<br>Employee (SGE)<br>Member<br>Special            |
| Gersten,<br>Russell          | 05/22/2006   | 04/18/2008 | Executive Director, Instructional Research Group; Professor Emeritus, College of Education, University of Oregon  | Government<br>Employee (SGE)<br>Member<br>Special            |
| Loewenberg<br>Ball, Deborah  | 05/22/2006   | 04/18/2008 | Dean, School of Education and Collegiate Professor, University of Michigan  | Government Employee (SGE) Member                             |
| Loveless, Tom                | 05/22/2006   | 04/18/2008 | Director, Brown Center on Education Policy and Senior Fellow in Governance Studies, The Brookings Institution   | Special<br>Government<br>Employee (SGE)<br>Member<br>Special |
| Ma, Liping                   | 05/22/2006   | 04/18/2008 | Senior Scholar for the Advancement of Teaching, Carnegie Foundation   | Government   |
| Reyna, Valerie               | 05/22/2006   | 04/18/2008 | Professor of Human Development and Professor of Psychology,<br>Cornell University   | Special<br>Government<br>Employee (SGE)<br>Member            |
| Schmid,<br>Wilfried          | 05/22/2006   | 04/18/2008 | Professor of Mathematics, Harvard University  | Special Government Employee (SGE) Member                     |
| Siegler, Rober               | t 05/22/2006 | 04/18/2008 | Teresa Heinz Professor of Cognitive Psychology, Department of Psychology, Carnegie Mellon University  | Special<br>Government<br>Employee (SGE)<br>Member            |
| Simon,<br>Raymond            | 05/15/2006   | 04/18/2008 | Deputy Secretary, U.S. Department of Education  | Ex Officio Member  |
| Simons, Jim                  | 08/14/2006   | 04/18/2008 | President of Renaissance Technologies Corporation; former Chairman of the Mathematics Department, State University of New York at Stony Brook                                     | Special<br>Government<br>Employee (SGE)<br>Member<br>Special |
| Stotsky,<br>Sandra           | 05/22/2006   | 04/18/2008 | Independent researcher and consultant in education; former Senior Associate Commissioner, Massachusetts Department of Education   | Government Employee (SGE) Member                             |
| Whitehurst,<br>Grover "Russ" | 05/15/2006   | 04/18/2008 | Director, Institute of Education Sciences, U.S. Department of Education   | Ex Officio Member  |

Williams, Vern 05/22/2006 04/18/2008 Math Teacher, Longfellow Middle School, Fairfax, VA

Government
Employee (SGE)
Member

Member Special Government Employee (SGE)

 $Wu, Hung\text{-Hsi} \quad 05/22/2006 \quad 04/18/2008 \text{ Professor of Mathematics, University of California at Berkeley}$ 

Member

Checked if Applies

Special

## **Number of Committee Members Listed: 24**

## **Narrative Description**

The work of the National Mathematics Advisory Panel addresses goals two and four of the U.S. Department of Education's Strategic Plan.Goal Two: Improve Student AchievementImprove achievement for all groups of students by putting reading first, expanding high quality mathematics and science teaching, reforming high schools, and boosting teacher and principal quality, thereby closing the achievement gap.Goal Four: Transform Education into an Evidence-Based FieldStrengthen the quality of educational research.

# What are the most significant program outcomes associated with this committee?

| Improvements to health or safety                  |   |
|---|---|
| Trust in government                               |   |
| Major policy changes                              | ✓ |
| Advance in scientific research                    | ✓ |
| Effective grant making                            |   |
| Improved service delivery                         | ✓ |
| Increased customer satisfaction                   | ✓ |
| Implementation of laws or regulatory requirements |   |
| Other   |   |
|   |   |

#### **Outcome Comments**

The National Math Panel presented its Final Report to the Secretary of Education on March 13, 2008. It is too early to anticipate program outcomes. However, \$95 million has been requested from Congress for Math Now programs that will be informed by the Panel's report. We expect there will be policy changes and additional scientific research in mathematics education as a result of the report's findings and recommendations.

# What are the cost savings associated with this committee?

| Chec | ked | if | Αn   | nli          | ies |
|------|-----|----|------|--------------|-----|
|      | NO. |    | ' VP | $\mathbf{v}$ | -   |

None

| Unable to Determine        | ✓ |
|----------------------------|---|
| Under \$100,000            |   |
| \$100,000 - \$500,000      |   |
| \$500,001 - \$1,000,000    |   |
| \$1,000,001 - \$5,000,000  |   |
| \$5,000,001 - \$10,000,000 |   |
| Over \$10,000,000          |   |
| Cost Savings Other         |   |

# **Cost Savings Comments**

The National Math Panel presented its Final Report to the Secretary of Education on March 13, 2008, and it is too early to determine the cost savings, if any, associated with this committee.

What is the approximate <u>Number</u> of recommendations produced by this committee for the life of the committee?

45

#### **Number of Recommendations Comments**

The National Math Panel's Final Report, issued on March 13, 2008, contains 45 findings and recommendations on numerous topics including curricular content, learning processes, instructional practices and materials, teachers and teacher education, assessments, and research priorities.

What is the approximate <u>Percentage</u> of these recommendations that have been or will be <u>Fully</u> implemented by the agency?

# % of Recommendations Fully Implemented Comments

At this point the percent is unknown. The National Math Panel presented its Final Report to the Secretary of Education on March 13, 2008, and it is too early to report on fully implemented recommendations.

What is the approximate <u>Percentage</u> of these recommendations that have been or will be <u>Partially</u> implemented by the agency?

0%

# % of Recommendations Partially Implemented Comments

At this point the percent is unknown. The National Math Panel presented its Final Report

to the Secretary of Education on March 13, 2008, and it is too early to report on partially implemented recommendations.

| Does the agency provide the committee with implement recommendations or advice offered | • •                                   |
|--|---------------------------------------|
| Yes No Not Applicable ✓  |                                       |
| Agency Feedback Comments   |                                       |
| NA   |                                       |
| What other actions has the agency taken as a   | a result of the committee's advice or |
| recommendation?  |                                       |
|  | Checked if Applies                    |
| Reorganized Priorities   |                                       |
| Reallocated resources  |                                       |
| Issued new regulation  |                                       |
| Proposed legislation   |                                       |
| Approved grants or other payments  |                                       |
| Other  | ✓                                     |

#### **Action Comments**

The Secretary's office is collaborating on a National Forum, which will take place in October 2008, to discuss the findings and recommendations of the National Math Panel with major stakeholders. The Department is incorporating findings and recommendations into existing programs including the Teacher-to-Teacher Summer Institute and the Doing What Works project. The Math Panel's report will be presented at a Title I conference in May of 2008. The Final Report states, "Positive results can be achieved in a reasonable time at accessible cost, but a consistent, wise, community-wide effort will be required. Education in the United States has many participants in many locales—teachers, students, and parents; state school officers, school board members, superintendents, and principals; curriculum developers, textbook writers, and textbook editors; those who develop assessment tools; those who prepare teachers and help them to continue their development; those who carry out relevant research; association leaders and government officials at the federal, state, and local levels. All carry responsibilities. All can be important to success."

Is the Committee engaged in the review of applications for grants?

No

# **Grant Review Comments**

At this point, there are no grant programs associated with the work of the National Math Panel.

# How is access provided to the information for the Committee's documentation?

Contact DFO
Online Agency Web Site
Online Committee Web Site
Online GSA FACA Web Site

Publications
Other

#### **Access Comments**

www.ed.gov/mathpanel